

# LOUISIANA RELAY ADMINISTRATION BOARD

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SECRETARY

September 15, 2012

*Received & Inspected*  
*NOV 23 2012*  
*FCC Mail Room*

Marlene H. Dortch  
Office of the Secretary  
Federal Communications Commission  
Room TW-A325  
445 12th Street SW  
Washington, DC 20554

Re: TRS Certification Application

Dear Ms. Dortch:

In reference to Public Notice DA 12-1187 released July 25, 2012, the Louisiana Relay Administration Board, on behalf of the Louisiana Public Service Commission, respectfully submits the attached application for renewal of the Louisiana Telecommunications Relay Service. The State of Louisiana is meeting all FCC minimum requirements and all of the required information is included in this filing.

If any further information or clarification is needed we will be pleased to promptly provide the same.

Sincerely,



Ms. Bonnie Eades  
President, Louisiana Relay Administration Board

**Telecommunications Relay Service  
Application for Renewal of current Certification  
State of Louisiana**

**Submitted to:**

Marlene H. Dortch  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street SW, Room TW-A325  
Washington, DC 20554

**Submitted by:**

Louisiana Relay Administration Board  
Post Office Box 91154  
Baton Rouge, LA 70821

**Provider of Service:**

**Hamilton Telephone Company**  
**d/b/a Hamilton Telecommunications**  
1001 Twelfth Street  
Aurora, NE 6881  
402-694-3656 TTY/Voice  
800-618-4781 Toll Free  
402-694-5037 FAX

## **Introduction**

This is an application on behalf of the State of Louisiana submitted by the Louisiana Relay Administration Board to have the Louisiana Telecommunications Relay Service be certified as a Telecommunications Relay Service pursuant to the rules and procedures set forth by the Federal Communications Commission. The State of Louisiana has been certified for the certification time period beginning July 26, 2008 and ending July 25, 2013.

Official notices, documentation and correspondence related to this application should be directed to:

Bonnie Eades, President  
Relay Administration Board  
Post Office Box 91154  
Baton Rouge, LA 70821  
Voice (504) 528-2090


Operational questions about the center may also be directed to the following:

Dixie Ziegler  
Vice President of Relay  
Hamilton Relay, Inc.  
1001 12th Street  
Aurora, NE 68818  
Voice/TTY: 402-694-3656  
Toll Free: 800-618-4781  
Fax: 402-694-5037  
E-mail: [dixie.ziegler@hamiltonrelay.com](mailto:dixie.ziegler@hamiltonrelay.com)  
Website: [www.hamiltonrelay.com](http://www.hamiltonrelay.com)

## **Request for Renewal of Current State Certification**

Wherefore, the Louisiana Relay Administration Board requests that the Federal Communications Commission certify the State of Louisiana Telecommunications Relay Service provided through Hamilton Telephone Company in Aurora, Nebraska.

The Louisiana Relay Administration Board  
on behalf of the State of Louisiana

By: 

Bonnie Eades, President  
Relay Administration Board  
Post Office Box 91154  
Baton Rouge, LA 70821  
Voice (504) 528-2090

**TRS Contract Status**

Hamilton Telephone Company d/b/a Hamilton Telecommunications is operating the Louisiana Relay Service under contract with the Louisiana Relay Administration Board. The term of the current contract is effective January 15, 2010 to January 14, 2013 with the possibility of two, two-year renewals.

Hamilton provides TRS service for the State of Louisiana from an in-state center located at 9107 Bluebonnet Centre Blvd., Baton Rouge, LA 70809.

The Louisiana Relay Service provides users with a complete service package including all features and services as detailed in this filing. Training for Communication Assistants is continual. Louisiana Relay Service has also developed an outreach program for the State of Louisiana with a team of staff people devoted to this function.

## ***§ 64.604 Mandatory minimum standards.***

*The standards in this section are applicable December 18, 2000, except as stated in paragraphs (c)(2) and (c)(7) of this section.*

*(a) Operational standards –*

*(1) Communications assistant (CA).*

*(i) TRS providers are responsible for requiring that all CAs be sufficiently trained to effectively meet the specialized communications needs of individuals with hearing and speech disabilities.*

*(ii) CAs must have competent skills in typing, grammar, spelling, interpretation of typewritten ASL, and familiarity with hearing and speech disability cultures, languages and etiquette. CAs must possess clear and articulate voice communications.*

*(iii) CAs must provide a typing speed of a minimum of 60 words per minute. Technological aids may be used to reach the required typing speed. Providers must give oral-to-type tests of CA speed.*

Recognizing that high quality Relay Communications Assistants ("CAs") are critical to providing consumer satisfaction, Louisiana Relay thoroughly trains its Relay CAs to meet the specialized communications needs of individuals who are deaf, hard of hearing or have difficulty speaking. All Louisiana Relay CAs possess clear and articulate voice communications. They have competent skills in typing, grammar, spelling, interpretation of typewritten ASL, and familiarity with the various cultures of relay users, languages and etiquette. All Louisiana Relay CAs provide a typing speed of a minimum of 60 words per minute, and Hamilton confirms this by giving oral-to-type tests of CA speed.

CAs are trained to relay calls in a manner that meets and often exceeds FCC standards. The following describes how Louisiana Relay's service provider trains its CAs to meet operational proficiency standards stated above. Before hiring, exams are given to each applicant in the following areas to ensure that the candidate has the needed skills to become a fully trained Relay CA:

- (1) Spelling skills (must achieve at least 90% correct)
- (2) Reading skills (must be able to read clearly and distinctly)
- (3) Typing proficiency

Additional details about these requirements are as follows:

### **Spelling Skills**

The minimum spelling skill required of Louisiana Relay Communication Assistants is the ability to quickly and easily spell words that are equivalent to that of a beginning college

level conversation. CAs must pass a spelling exam to be eligible to work as a Louisiana Relay CA and score in at least the 90th percentile. The spelling skills exam is based on a 12th grade spelling level. Louisiana Relay performs similar testing for Spanish CAs.

### **English Reading, Speaking, and Writing Skills**

Communication Assistants must meet all grammar proficiency requirements including reading, speaking, and writing English Communication at a minimum of a 12th grade level prior to employment. Louisiana Relay also tests for diction, clear and articulate voice communications and a neutral accent by requiring each prospective CA to complete a reading exam.

### **Typing Proficiency**

Communication Assistants must type 60 words per minute (wpm) for five minutes. Louisiana Relay exceeds this service level by requiring CAs to maintain a 95% accuracy level while typing 60 wpm. Louisiana Relay's provider has an average typing speed of 66.8 wpm with 99% accuracy.

Newly hired CAs are required to meet the Louisiana Relay minimum typing proficiency standard on an oral-to-text exam within a three week period before they may take calls. Louisiana Relay also tests its CAs every four months in a manner simulating actual working conditions to document current proficiency levels. If an CA is unable to meet the 60 wpm requirement, the CA is removed from live relay calls until further training and compliance can be accomplished.

Louisiana Relay also uses a computer based typing program for continuing enhancement of keyboarding, spelling and grammar skills. This program is available to all CAs.

Louisiana Relay performs test calls to document current proficiency levels of the CAs and to make sure each is making progress over the term of their employment. Conducting typing tests during live relay calls also ensures that Relay CAs are meeting all typing requirements during actual calls.

### **Training**

All Louisiana Relay staff, including management, receive 20 hours of initial training devoted solely to disability issues including ASL "gloss", ASL style and grammar, tone of voice, deaf, hard of hearing and hearing cultures, etiquette, pertinent information about the needs of people who are deaf or hard-of-hearing, the role of the CA (including training to relay the contents of a call as accurately as possible without intervening in communication) and operation of relay telecommunications equipment including answering machines and computerized services. This training is done through videos, seminars with staff who are familiar with the relay communities, observation (both simulated and on live calls), and a variety of role-play scenarios. CAs are well trained to effectively meet the specialized needs of relay users.

In addition to basic training during new hire training, Louisiana Relay provides an additional 12 hours of specialized/cultural training annually.

Spanish language relay CAs must complete the same training as all traditional Relay CAs and must additionally pass tests confirming proficiency in the Spanish language.

### **Proficiency Examinations**

Louisiana Relay CAs begin relaying calls at the end of the three-week training period, assuming all examinations have been passed and proficiency skills have been shown. In addition to these exams and skill tests, CAs must successfully complete several relay call scenarios to demonstrate proficiency in simulated scenarios. Hamilton can then determine that a CA is meeting and exceeding all minimum FCC proficiency requirements. Tests are kept confidential and portions of the tests are changed routinely. CAs are tested on a variety of topics monthly to ensure that they continue to meet all requirements.

### **CA Performance Monitoring to Ensure Each CA Continues to Meet All Requirements**

Through its provider's advanced relay platform, Louisiana Relay has established a unique remote call monitoring system. Louisiana Relay uses this call monitoring system to continually monitor call performance. Such items as proficiency and professionalism, procedures, language, voice quality, decorum, and professional knowledge and skills are evaluated daily.

Louisiana Relay constantly monitors its CAs for quality control. Two formal call evaluations are completed each month, and informal "spot checking" is conducted every day to ensure that CAs are performing properly on calls.

Formal call monitoring includes observation of the call from start to finish. The CA either earns a passing or failing score in the applicable category. These monitorings are conducted by a Relay Supervisor and the Monitoring Supervisor. Two formal evaluations are required of each CA per month.

Through the call monitoring process, any CA not in compliance with quality standards is taken off duty for further training and re-testing. These CAs are put on probation and monitored frequently to ensure continued improvement.

*(v) CAs answering and placing a TTY-based TRS or VRS call must stay with the call for a minimum of ten minutes. CAs answering and placing an STS call must stay with the call for a minimum of fifteen minutes.*

Louisiana Relay does not change Communication Assistants during a call. Even at the end of shifts, over lunch hours, and other breaks, Louisiana Relay CAs stay with a call until it is completed. Our experience has been that this provides much greater continuity for the user.

Louisiana Relay exceeds the FCC standard for substitution of CAs for TTY-based TRS and STS TRS.



Louisiana Relay only substitutes a CA if the following should occur:

- **A caller requests a change in gender of the CA**  
Louisiana Relay CAs, when requested, will switch a call to another CA who is of the same gender as the caller and retain that CA for the user throughout the relay call.
- **Verbal abuse or obscenity is directed to the CA**  
If a relay user becomes abusive towards a CA (calling names, etc.) or does not give a number to dial, Louisiana Relay's procedure is to send a hot key requesting the number to call three times, waiting approximately 20 to 30 seconds between each time the hot key is sent. If the CA is still being harassed or is not given a number to dial, a supervisor is called. The supervisor will try to process the call. If abuse continues or there is no response, a disconnect slip will be completed.
- **The call requires a specialist (Spanish language, speech to speech, etc.)**
- **A perceived conflict of interest exists or,**
- **A major emergency exists**

A change never takes place until either the calling or called party has completed their part of the conversation.

If a call does need to be transferred, another CA replaces the CA relaying the call at the same workstation so that the relay user's call is not interrupted (except to identify the new CA to both parties). A supervisor monitors the change and must approve the change based on the criteria listed above.

*(vi) TRS providers must make best efforts to accommodate a TRS user's requested CA gender when a call is initiated and, if a transfer occurs, at the time the call is transferred to another CA.*

Communication Assistants, when requested, will switch a call to another Communication Assistant who is of the gender requested by the caller and retain that gender for the user throughout the relay call. Louisiana's provider has the technical capability to automatically route calls to CAs of the preferred gender, if available, based on customer profile selection.

*(vii) TRS shall transmit conversations between TTY and voice callers in real time.*

Louisiana Relay transmits conversations between Relay and voice callers in real time.

*(2) Confidentiality and conversation content.*

*(i) Except as authorized by section 705 of the Communications Act, 47 U.S.C. 605, CAs are prohibited from disclosing the content of any relayed conversation regardless of content, and with a limited exception for STS CAs, from keeping records of the content of any conversation beyond the duration of a call, even if to do so would be inconsistent with state or local*

*law. STS CAs may retain information from a particular call in order to facilitate the completion of consecutive calls, at the request of the user. The caller may request the STS CA to retain such information, or the CA may ask the caller if he wants the CA to repeat the same information during subsequent calls. The CA may retain the information only for as long as it takes to complete the subsequent calls.*

*(ii) CAs are prohibited from intentionally altering a relayed conversation and, to the extent that it is not inconsistent with federal, state or local law regarding use of telephone company facilities for illegal purposes, must relay all conversation verbatim unless the relay user specifically requests summarization, or if the user requests interpretation of an ASL call. An STS CA may facilitate the call of an STS user with a speech disability so long as the CA does not interfere with the independence of the user, the user maintains control of the conversation, and the user does not object. Appropriate measures must be taken by relay providers to ensure that confidentiality of VRS users is maintained.*

Louisiana Relay CAs are instructed not to disclose the content of any relayed conversation regardless of content, and to refrain from keeping records of the content of any conversation beyond the duration of a call, even if to do so would be inconsistent with state or local law. CAs are instructed not to intentionally alter a relayed conversation. To the extent that it is not inconsistent with federal, state or local law regarding use of telephone company facilities for illegal purposes, CAs are instructed to relay all conversation verbatim unless the relay user specifically requests summarization or if the user requests interpretation of a call. Louisiana Relay employs various methods to ensure that all relay users' confidentiality is maintained, including the restriction of access to its call centers and the partitioning of CAs into individual cubicles to ensure relay call privacy. All Louisiana Relay employees must sign a confidentiality agreement committing to keep all information confidential.

All information about users is treated confidentially and will not be sold, distributed, shared, or divulged by Hamilton or any of its employees, unless divulging such information is compelled by lawful order.

### *(3) Types of calls.*

*(i) Consistent with the obligations of telecommunications carrier operators, CAs are prohibited from refusing single or sequential calls or limiting the length of calls utilizing relay services.*

*(ii) Relay services shall be capable of handling any type of call normally provided by telecommunications carriers unless the Commission determines that it is not technologically feasible to do so. Relay service providers have the burden of proving the infeasibility of handling any type of call.*

*(iii) Relay service providers are permitted to decline to complete a call because credit authorization is denied.*

Louisiana Relay does not and will not place any restrictions on the length or number of single or sequential calls placed by customers through the relay center. Louisiana Relay will continue to manage its traffic loads in a manner that will not require that customers be asked to call back later.

Louisiana Relay is capable of processing non-coin-sent paid calls, sent-paid calls, collect calls, person-to-person calls, international calls, hotel calls and calls charged to a third party. Louisiana Relay is also able to process credit cards, any Louisiana local exchange calling cards and all non-proprietary interexchange company calling cards that are accessed by dialing an 800 number. This includes all major interexchange company calling cards. Relay users simply inform Louisiana Relay's CAs when they want to use an alternate form of billing. The CA selects the correct billing method from an on-screen menu and the call is then placed. The customer's carrier of choice actually bills the call (based on conversation time) as described previously, for intralata, interlata and international calls. Louisiana Relay bills no calls and receives no revenue.

#### **Coin Sent Paid**

Louisiana Relay is capable of handling any call normally provided by common carriers with the exception of coin sent paid calls. The technology and networks between the common carrier network, payphones and relay do not allow for signaling to be passed so that a Communication Assistant can determine when coins have been dropped into the payphone. Furthermore, the FCC ordered that coin sent paid calls are not feasible.

Louisiana Relay does not charge relay users who want to place a local call from a payphone as stated in the current FCC coin-sent paid order.

Relay users making a long distance call from a payphone are able to use a calling card (debit card, regular calling card, etc.) or place a collect or third party call. The customer's carrier of choice will then rate and bills any long distance payphone calls. Once billing has been established the call will be processed as a regular relay call. In this manner, all relay users have access to anyone from a payphone.

#### **Cellular/Wireless/PCS Phone Access**

Louisiana Relay is capable of processing relay calls that involve pagers, cellular and personal communications services. These services are all part of the Public Switched Network and they are handled just like any other relay call.

Workstations have built-in DTMF generating capabilities to perform dialing or access functions for relay users. The DTMF software sends tones that activate automated voice systems and pagers. With DTMF capability, Louisiana Relay can navigate voice menus, answering machines, or any other automated system that either record or passes on voice, text, or electronic message to the other party even when using a wireless device.

The relay switch identifies wireless calls with a false ANI associated with it and Louisiana Relay processes the call as “no bill” preventing the relay user from having to use alternate form of billing. One exception is when false ANI information is forwarded. Although infrequent, this situation would require the CA to ask for an alternate form of billing.

### **Directory Assistance**

Louisiana Relay gives all relay users access to local, intrastate and interstate directory assistance services via the relay and processes directory assistance requests in the same manner as any other relay requests.

Upon receiving the area code from the relay user, the CA dials the correct area code plus 555-1212. When reaching the directory assistance operator, the CA identifies the relay and asks for the city and state the user has given while at the same time keeping the relay user informed. When the correct number has been obtained the call is handled as a regular relay call.

### **End User Billing for Directory Assistance**

The relay user can pick which carrier they want to use for directory assistance. The relay user's carrier of choice bills for interlata and intralata directory assistance calls at their tariffed rate. With intralata presubscription, all billing is performed by the customer's carrier. All directory assistance calls are sent to the customer's carrier of choice for processing and billing. Louisiana Relay does not set any rates for long distance or operator assisted calls since the customer's carrier of choice bills these calls. All directory assistance calls are billed via the customer's long distance carrier.

### **Network Access**

Louisiana Relay's system provides for and serves all of the following types of calls.

- (1) Local calls originating and terminating within Louisiana, including EAS and optional calling plan calls
- (2) Intralata, interstate calls which are considered local calls – Billed to the TRS Interstate Fund
- (3) Intralata calls originating and terminating within Louisiana
- (4) Interstate calls that originate within Louisiana and terminate outside of Louisiana - Billed to the TRS Interstate Fund
- (5) Interstate calls that originate outside of Louisiana and terminate in Louisiana - Billed to the TRS Interstate Fund
- (6) Interstate calls that originate outside of Louisiana and terminate outside of Louisiana - Billed to the TRS Interstate Fund

Louisiana Relay 800 numbers, including 711, will be able to place the call types listed above. Louisiana Relay's service is designed so that all calls made through its relay centers are billed from the originating telephone number to the terminating telephone number as if the call were made directly with no relay intervention. The relay platform stores the necessary information about extended area service and optional calling plan arrangements in Louisiana so that calls made within an EAS area or optional calling area are not billed to the customer. ANI information appears at the workstation automatically and the terminating number is keyed in by the Communication Assistant so that a billing record can be created. For calls originating in areas where ANI information is not forwarded, Louisiana Relay's Communication Assistants will key in originating number information.

### **Local and Intrastate Relay Calling**

Louisiana Relay provides local and intrastate calling to the users of Louisiana Relay and has obtained the necessary information (NPA/NXX) to build a database to identify the difference between local and intrastate calls (this includes expanded local information).

Louisiana Relay's provider has contacted the LECs within Louisiana to collect all EAS and local optional calling plan information. Once this information was gathered, Louisiana Relay's provider updated its database within its switching platform and its toll processing system to identify certain NPA-NXXs as toll-free calling areas. Relay users with access to optional calling plans will not be billed any more for calls to the specific optional calling area than if they would have called directly through their local network.

The calling party's ANI is compared to the called number. Louisiana Relay's relay database determines if it is a local or intrastate toll call and gives the Communication Assistant notification if billing information is required. If it is a local call, no billing arrangements are necessary and there are no charges. If it is a toll call, Louisiana Relay sends the call to the customer's carrier of choice for billing purposes.

The entire call process and CA procedures are designed to make the relay center seem invisible. To the relay user, a call looks like it was placed from his or her primary location to the call destination. Relay users do not see or get billed for the "links" going to and from the relay center. Relay users receive no billing for local calls. Intrastate/intralata calls are billed by the customer's carrier, as described further in this Section.

### **Access to Regionally Directed Toll-Free Numbers**

Louisiana Relay allows access to regionally directed toll-free numbers. Because Louisiana Relay passes true Caller ID information, the caller's ANI reflects a Louisiana number which results in the call being routed to the correct state or regional location.

### **Access to Restricted Toll Free Numbers**

The service provided by Louisiana Relay allows access to restricted 800 numbers and other special prefixes. Louisiana Relay is providing this service today through an

incumbent LEC via re-originating dial tone. Louisiana Relay makes sure that all of the relay users in Louisiana have access to all 800 numbers and other special prefixes.

#### **Access to Businesses with Special Prefixes**

Louisiana Relay understands that some local telephone companies have abbreviated numbers available for services calls. Louisiana Relay will continue to work with LECs to ensure proper routing and will allow Louisiana relay users to access businesses with special prefixes.

#### **Extended Area Service**

Louisiana Relay's provider has obtained the needed local calling area information from the Louisiana LECs and routinely updates this information. This includes any EAS and/or local optional calling plan data. This data is collected through letters, telephone calls, and meetings with the LECs in Louisiana.

Louisiana Relay's provider also makes use of the Terminating Point Master (TPM) from Telcordia to verify Latas, as well as vertical and horizontal positions, which are necessary elements in determining mileage and jurisdictions. Louisiana Relay's provider uses the TPM to define call jurisdictions by linking the calling and called numbers to geographic data tables that contain NPA-NXX information, identifying intralata, interlata, or local/EAS. The jurisdiction is also defined at the workstation during the actual call. Louisiana Relay's provider updates the TPM file monthly.

#### **Interstate and International Calls**

Louisiana Relay provides interstate and international calling to Relay Louisiana users. Interlata (including interstate and international) and intralata long distance toll charges are recorded and billed by the relay users' carrier of choice in the same manner as the carrier bills that customer for direct interlata and intralata long distance calls. On each interlata and intralata call, Louisiana Relay forwards the appropriate information digits, calling number and called number as part of the call information so that the long distance company can bill the customer directly or through their normal billing mechanisms.

When a call has been defined as a long distance call, Louisiana Relay sends this call to its relay switching tandem. The customer's selected carrier code is sent with each call so that the tandem sends the call to the customer's carrier of choice. Each call is identified as a relay call. If a relay user has signed up with his/her carrier of choice for a "relay" discount or the carrier is required to give a relay discount, the carrier will bill the call as a relay call and apply any discounts. Relay Louisiana users will receive one bill from their carrier of choice just like they do for all of their direct calls. Louisiana Relay explains this type of billing arrangement through all Outreach and Customer Service activities, in newsletters, relay materials, etc. so that relay users understand how to select a carrier and find the best long distance rates.

The section below (under the heading End User Billing for all Toll Calls) contains a description of how end users are billed for toll calls.

### Inbound International Calls

Louisiana Relay provides inbound International calling in which the relay user pays to place a call from an International location to the relay center. Louisiana Relay then places the outbound call to a destination in the United States free of charge and relays the conversation for them. All processed International calls are billed to the Interstate TRS Fund Administrator.

### End User Billing for all Toll Calls

Interlata (including interstate and international) and intralata and intrastate long distance toll charges are recorded and billed by the relay users' carrier of choice in the same manner as the carrier bills that customer for direct interstate and intrastate long distance calls. On each interlata and intralata call, Louisiana Relay forwards the appropriate information digits, calling number and called number as part of the call information so that the long distance company can bill the customer directly or through their normal billing mechanisms.

Louisiana Relay forwards information on each toll call to the relay user's carrier at the time the relay call actually takes place. The record will contain: the originating and terminating numbers and the call type (e.g., person-to-person, collect). Interlata and intralata billing records will be created by the interexchange carrier as a result of the information digits and calling and called number data being sent to the interexchange carrier at the time the call is made. Long distance charges are based on the originating and terminating numbers. The long distance carrier bills are based on conversation time using their own rounding calculations. Louisiana Relay does not pass on session time to the carrier so only conversation time is billed by the carrier. Billing and collection is then the responsibility of the interexchange carrier who carries the call.

Louisiana Relay's provider has the unique advantage in the industry of being a relay provider which is not an IXC. The customer's carrier of choice actually bills the call (based on conversation time) for intralata, interlata, and international calls. This means that the timing of the call for billing purposes begins immediately upon pickup at the called number. If a caller requests a person-to-person toll call, the timing begins only after the requested person has answered the call. If a relay user has signed up with his/her carrier of choice for a "relay" discount or the carrier is required to give a relay discount, the carrier will bill the call as a relay call and apply any discounts. Louisiana Relay bills no calls and receives no revenue. All billing is performed by the carrier.

The format of the bill for all toll calls will be determined by the carrier as Louisiana Relay does not bill any relay calls. However, the call digit information will identify the call as a TRS call and will further designate the type of call (i.e. 3rd number call, direct dial call, collect call, and person-to-person call). This will allow carriers to correctly identify each relay call on their bill.

All billing to the relay user is based on minutes of conversation and is processed by the relay user's carrier of choice.

Louisiana Relay has the ability to place the following call types:

Bill to ANI	Person to Person
Third Party	PP - Bill to ANI
Collect	PP – Third Party
Calling Card/Credit Card	PP – Collect
Prepaid Calling Cards	PP – Calling Card/Credit Card

### **Automated Billing System to Determine Call Jurisdiction**

Louisiana Relay's provider makes use of an automated billing system to determine call jurisdiction. Louisiana Relay's provider marks on every billing record whether the call is local, EAS, intrastate or interstate. This is done immediately when the call is placed. Louisiana Relay's provider performs a second check of call jurisdiction during the monthly settlement process. By determining the jurisdiction of every relay call twice, Louisiana Relay's provider can guarantee that call jurisdictions are established correctly and that Louisiana Relay will only pay for intrastate relay minutes. In addition to redundant jurisdiction look-ups, Louisiana Relay's provider also accounts for every minute of relay use. This means that all reports must balance at the end of every month in each jurisdiction category. This additional safeguard ensures that all minutes are accounted for correctly.

*(iv) Relay services shall be capable of handling pay-per-call calls.*

### **Pay-Per-Call Services**

Louisiana Relay allows relay users to access intrastate and interstate 800 or 900 pay-per-call services in which the company providing the service bills the end-user directly. Louisiana Relay has established the necessary trunking to the carriers participating in relay equal access so that the carrier can bill directly for this call.

Louisiana Relay's provider bills the Interstate TRS Fund and the Louisiana Public Service Commission using the percentage split defined by the Interstate TRS Fund Administrator for 800 and 900 calls. Customers may choose to block 900 calls from being made altogether via forms provided by Louisiana Relay.

*(v) TRS providers are required to provide the following types of TRS calls:  
(1) Text-to-voice and voice-to-text; (2) VCO, two-line VCO, VCO-to-TTY, and VCO-to-VCO; (3) HCO, two-line HCO, HCO-to-TTY, HCO-to-HCO.*

### **TTY/ASCII to Voice**

Louisiana Relay is able to accept a call from a TTY equipped caller, place a call to a hearing and voice capable caller and translate the voice messages to TTY messages and TTY messages to voice messages in order to complete the communications link.



**Voice Call Processing**

Louisiana Relay is able to accept a call from a hearing and voice capable caller, place a call to a text based caller and translate the voice messages to TTY messages and TTY messages to voice messages in order to complete the communications link.

**Voice Carryover (VCO)**

Louisiana Relay allows VCO users to utilize both TTY modes, acoustic mode and direct connect mode. A variety of VCO call types are also available through Louisiana Relay.

**Two-Line VCO**

Two-line VCO capability allows a VCO user to have a more interactive conversation. By using two telephone lines the caller, if they have some hearing available, can listen to their conversation on one line while receiving typed text from a CA on the other line, thus creating a more natural flow of conversation.

To place a two-line VCO call, the ASCII/TTY user calls relay, connects with a CA and requests that the CA make a call to their voice (second) line. The relay user must have two telephone lines and 3-way calling. Once connected in voice, the customer conferences in the third party (the party they want to speak with). Now, the CA only types what the third party says. The CA is virtually invisible to the voice customer, allowing for a two-way uninterrupted conversation to take place.

**Reverse Two-Line VCO**

Hamilton's Two-line VCO feature also works in the reverse when a voice user places a call to a two-line VCO user through relay. It is then called Reverse Two-line VCO.

**VCO-TTY and TTY-VCO**

Louisiana Relay provides this service in which VCO users can call a TTY user (or vice versa) through the relay. The VCO user voices his/her conversation which the CA types to the TTY user. The TTY user types his/her conversation directly to the VCO user.

**VCO-VCO**

Louisiana Relay provides VCO to VCO service where the CA types to both parties, saving the VCO users from having to type their part of the conversation.

**Hearing Carryover (HCO)**

Louisiana Relay allows HCO users to utilize both TTY modes, acoustic mode and direct connect mode. A variety of HCO call types are also available through Louisiana Relay.

**Two-Line HCO**

To place a two-line HCO call, the ASCII/TTY user calls relay, connects with a CA and requests that the CA make a call to their voice (second) line. The relay user must have two telephone lines and 3-way calling. Once connected in voice, the relay user conferences in the third party via the voice line (the party they want to speak with). Now, the CA only voices what the HCO user types. The CA is virtually invisible to the voice customer, allowing for a two-way uninterrupted conversation to take place.

**HCO-TTY and TTY-HCO**

Louisiana Relay provides this feature allowing HCO users to contact TTY users (or vice versa) via the relay.

**HCO-HCO**

This service allows two HCO users to contact each other through the relay. Louisiana Relay provides HCO to HCO service where the CA voices to both parties, preventing the HCO users from having to read the other party's conversation.

*(vi) TRS providers are required to provide the following features: (1) Call release functionality; (2) speed dialing functionality; and (3) three-way calling functionality.*

**TTY to TTY (Call Release)**

Louisiana Relay processes TTY to TTY calls when it is necessary to go through a voice switchboard first or if the originating TTY user is using a calling card that is accessed by calling an 800 number first. Once the CA reaches a compatible TTY user when placing a relay call, Louisiana Relay gives the calling party the option to communicate independent of the relay function.

The CA receives an automated message box with instructions to release the call from the workstation. Once the call has been released from the workstation, the CA is able to take any other incoming calls.

Using the above procedure, Louisiana Relay provides a true call release function to satisfy the FCC requirement, which removes the workstation from the call. If the call is a long distance call, the call is billed as a normal relay call (i.e., the relay user's carrier of choice).

**Voice to Voice Call Release**

Louisiana Relay provides a voice to voice call release function, which removes the workstation from the call. If the call is a long distance call, the call is billed as a normal relay call (i.e. the relay user's carrier of choice). Once the call has been released from the workstation, the call ceases to be a TRS call and is not subject to the per-minute charge to the State.

**Speed Dialing**

Relay users may choose up to 50 numbers they would like programmed for speed dial. When a Relay user makes a call to a number on their speed dial list, they first connect to the CA and just tell the CA, "pls call Mom". Speed dialing is available through the Louisiana Relay customer profile.

### **Three-Way Calling**

Louisiana Relay provides three-way calling capability, in which the customer (if the customer has purchased this feature from his/her LEC) can use this feature to either tie the third party directly into the conversation or to tie the third party in by making a second call to the relay center.

*(vii) Voice mail and interactive menus. CAs must alert the TRS user to the presence of a recorded message and interactive menu through a hot key on the CA's terminal. The hot key will send text from the CA to the consumer's TTY indicating that a recording or interactive menu has been encountered. Relay providers shall electronically capture recorded messages and retain them for the length of the call. Relay providers may not impose any charges for additional calls, which must be made by the relay user in order to complete calls involving recorded or interactive messages.*

### **Machine Recording Capabilities**

Louisiana Relay's recording function allows the Communication Assistant to record a voice announcement and then play back the message at a speed controlled by the Communication Assistant. The CA informs the relay user through the use of a hot key on the CA's terminal that a recording has been reached, followed by another hot key stating (CA HERE WOULD YOU LIKE COMPLETE MSG TYPED OR HOLD FOR A DEPT OR LIVE PERSON Q).

If a caller requests a department or live person, the CA types, "HLDING FOR DEPT/PERSON" and presses the appropriate option when the recording prompts.

If a caller requests listening to the complete message, the CA sends a hot key that states, "COLLECTING INFO PLS HLD" and the CA continues to collect the recording.

The message is retained only for the length of the call. This prevents the caller from having to call back several times to get the entire message. Once the originator of the call disconnects, the recording is automatically deleted from the system.

When Louisiana Relay has to redial to an answering machine, voice mail, interactive voice messaging unit or any other type of recording system, for whatever reason, Louisiana Relay does so without billing the customer for any subsequent long distance relay calls.

*(viii) TRS providers shall provide, as TRS features, answering machine and voice mail retrieval.*

### **Answering Machine and Voice Mail Retrieval**

Communication Assistants are trained in retrieving and relaying TTY messages to voice users and voice messages to TTY users from voice processing systems. Communication Assistants use the following procedures to obtain messages for relay users:

1. The user is informed that the Communication Assistant has reached a voice processing system.
2. If the user requests message retrieval, Louisiana Relay obtains the appropriate access codes from the user. Louisiana Relay does not retain access codes or any other information needed to access a voice mail system subsequent to the call. This information is considered “call” information and just like any other call information, is kept confidential.
3. After the voice processing system has been accessed, Louisiana Relay Communication Assistants begin to relay any messages that have been recorded or leave a message as requested. Louisiana Relay makes use of its advanced recording function to capture this information as discussed previously.
4. If the Communication Assistants must call again to finish relaying any messages, Louisiana Relay Communication Assistants do so without billing the end user for subsequent calls.

Louisiana Relay alerts relay users to the presence of a recorded message and/or interactive menu. Louisiana Relay uses hot keys (automatic macros) to announce recordings or interactive messages. Louisiana Relay does not charge a relay user for subsequent calls to a recording or to interactive message.

#### **Answering Machine Retrieval (Single-Line)**

Louisiana Relay provides this service in which messages from a voice or TTY answering machine or a single line telephone are retrieved by the CA. The caller requests Automatic Message Retrieval (AMR) or Single Line Answering Machine (SLAM) and plays the messages to the Communication Assistant by putting the handset near the speaker of the answering machine. Louisiana Relay records any messages, enabling the Communication Assistant to capture the information and type or voice it back to the relay customer. Once the information is relayed to the caller and the call is completed, the recording is automatically erased when the caller disconnects.

*(4) Emergency call handling requirements for TTY-based TRS providers. TTY-based TRS providers must use a system for incoming emergency calls that, at a minimum, automatically and immediately transfers the caller to an appropriate Public Safety Answering Point (PSAP). An appropriate PSAP is either a PSAP that the caller would have reached if he had dialed 911 directly, or a PSAP that is capable of enabling the dispatch of emergency services to the caller in an expeditious manner.*

#### **Procedure for Handling TRS Emergency Calls**

Louisiana Relay’s provider uses a national Emergency Call Relay Center, operated by Intrado, Inc., for the provision of handling emergency relay calls.

Louisiana Relay uses Intrado and follows the procedures below:

- If the caller has the local emergency number which needs to be accessed, the call is promptly placed and handled in the same manner as any other relay call.
- In the event that a caller does not have the access number to 911 and the emergency appears to be of a nature that time will not permit the caller to hang up and call directly to 911, the CA will contact the Emergency Call Relay Center (ECRXC) which is accomplished through one stroke on the keyboard.
- Simultaneously, the CA obtains the address from which the person is calling from and selects the “emergency call” box option on the software at the workstation. (A Supervisor assists every 911 call. When a Communication Assistant makes this selection, a Supervisor is notified immediately as a flag indicator on the Supervisor Console is activated.)
- Once connected to the ECRC, the CA will identify as a TTY relay call and relay the location of the caller. (If the CA does not obtain location information, the CA gives the ECRC the ANI of the caller.)
- The ECRC immediately transfers the call to the appropriate PSAP center. The ECRC drops off the call once confirming that both parties are on the line and the correct PSAP has been reached. The CA processes the call as normal.
- Louisiana Relay passes the caller's telephone number to the PSAP when a caller disconnects before being connected to emergency services.

### **Back-up Emergency Procedures**

As a back-up to Intrado in the event that Intrado is unable to match the caller with the appropriate PSAP, Louisiana Relay's provider has procedures in place to access its own emergency database:

- The software used by Louisiana Relay takes the NPA/NXX information from the ANI of an incoming call and matches it to information in its database. The ANI indicates what city or location a call is coming from. This NPA/NXX information is then cross-referenced to a list of locations in Louisiana stored in the database. Louisiana Relay has mapped each NPA/NXX in Louisiana to the appropriate PSAP. Once this search is complete (it only takes a second) the correct emergency telephone number is loaded automatically into the "outdial" box and the Communication Assistant can immediately dial the appropriate emergency personnel. This process ensures that Louisiana Relay users have access to the correct and appropriate PSAP.
- Louisiana Relay passes the caller's telephone number to the PSAP when a caller disconnects before being connected to emergency services.

- If the caller is using a cellular or wireless phone, the ANI is not a good indication of where the caller is actually positioned. In this case, the CA asks for the nearest city name and initiates an automated search for the appropriate PSAP. If several PSAPs are listed for the same city, the CA will try to identify the correct one with a quick question to the caller.
- Louisiana Relay's emergency database application described above meets the current requirements established by the FCC.

### **FCC Rules for Emergency Calls**

In the June 2004 order, the FCC adopted the definition of “appropriate” PSAP as “either a PSAP that the caller would have reached if he had dialed 911 directly, or a PSAP that is capable of enabling the dispatch of emergency services to the caller in an expeditious manner.” Louisiana Relay’s database automatically and immediately transfers the caller to the appropriate Public Safety Answering Point based on NPA/NXX information.

The key to providing the best service in emergency situations is to maintain an updated list of Public Emergency Service Answering Point numbers (i.e. 911 centers). Louisiana Relay accomplishes this through two mechanisms to ensure that relay users are connected to the appropriate PSAP:

- 1) through the use of Intrado’s 9-1-1 infrastructure and
- 2) through the PSAP database maintained by Louisiana's provider.

### **TTY to TTY Communications Between PSAP and Caller**

Louisiana Relay will process direct TTY to TTY communications between the PSAP and the TTY caller.

### **If a Caller Disconnects Before Being Connected to the PSAP**

In the event that a caller disconnects before being connected to the PSAP even if the CA is unable to get the number of the caller before the call is disconnected, the workstation contains a notification feature that initiates a command to write a record of the ANI calling for emergency assistance. The Supervisor can then access this information if needed, so no matter when the caller hangs up, Louisiana Relay can send the correct ANI information to the 911 center.

The Supervisor will contact the appropriate 911 center and give the dispatcher any pertinent information collected on the call. This includes ANI for the caller so that if the 911 center has “Enhanced 911 Services”, emergency personnel will be able to locate where the person in need is calling from.

During the course of emergency 911 calls, the CA continually solicits as much information as possible about the nature of the emergency so that in the event that the caller cannot complete the call for any reason, the CA may have an opportunity to seek out the appropriate emergency assistance. The CA then gives the dispatcher any

pertinent information collected on the call even if the originator of the call has disconnected. This includes ANI for the caller so that if the 911 center has “Enhanced 911 Services”, emergency personnel will be able to locate where the person in need is calling from. This meets the FCC’s current requirement where a CA must pass along the caller’s telephone number to the PSAP when a caller disconnects before being connected to emergency services. This allows the PSAP to follow their regular procedures, which is to call back the person calling for help.

The emergency call plan used by Louisiana Relay follows this section. This covers the scenario of a relay user disconnecting before the call is completed. If the 911 call is completed, the CA will follow normal relay procedures with the assistance of a supervisor and the caller’s ANI is transferred to the appropriate PSAP as described above.

### **911 Procedures if the caller disconnects before the emergency call to the PSAP is completed:**

Call the 911 Dispatch number that is listed in the Emergencyfile.txt or the emergency dispatch numbers file ASAP (all of this is immediately available on the CA’s workstation screen). Remember this is a 911 call.

When you reach the 911 dispatch operator use the following steps:

1. **Greeting:** This is “CA XXXX” from “State” Relay Center. We just received a 911 call that wasn’t completed. The caller uses a TTY and may be Hard of Hearing, Speech Disabled, or Deaf. The ANI is XXX-XXX-XXXX.
2. Ask the 911 dispatch operator if they have a TTY. If they do not proceed to item “3”. Ask if they know how to use the TTY. If they don’t know how to use the TTY proceed to item “3”. If they know how to use the TTY proceed to item “5”.
3. Give the 911 dispatch operator the Voice relay number for the correct state.
4. Ask the 911 dispatch operator if they know how to use the relay.
  - **Relay Explanation**  
The person you are calling through relay will be typing their conversation and the CA will read it to you.
5. Ask the 911 dispatch operator for their name or operator number. Record this information on the CA’s Emergency Call Slip.

Through its outreach programs and outreach materials, Louisiana Relay educates relay users about how to use 911 services. As a part of this information, Louisiana Relay encourages relay users to call 911 direct and to contact their local emergency service personnel using a TTY to ensure that the 911 center will process a TTY call correctly in the event of an emergency.

In addition, Louisiana Relay gives presentations to 911 centers routinely as part of its outreach program. Louisiana Relay provides training and other assistance to emergency dispatchers to ensure TTY calls or relay calls are handled correctly.

*(5) STS called numbers. Relay providers must offer STS users the option to maintain at the relay center a list of names and telephone numbers which the STS user calls. When the STS user requests one of these names, the CA must repeat the name and state the telephone number to the STS user. This information must be transferred to any new STS provider.*

### **Speech to Speech**

STS service allows individuals with a speech disability to use his/her own voice or a speech synthesizer when using the relay. STS users are able to communicate with any and all relay users including but not limited to VCO, HCO, TTY, 2LVCO, other STS users or standard phone users. Specially trained CAs process Speech to Speech calls. STS is also available in Spanish.

Louisiana Relay's provision of Speech to Speech meets all FCC requirements for Speech to Speech call processing.

STS CAs are permitted to facilitate a call for a user with a speech disability if the user does not oppose the intervention as required by the FCC.

Louisiana Relay provides STS users the same profile and all of the features contained within that profile which are currently available to other relay users. Louisiana Relay has a feature, which allows all relay users, including STS users, to maintain a list of names and telephone numbers. A relay user simply gives the name of the person to call to the CA. The CA repeats the name and states the number of the person to call. The Speed Dial feature is of great benefit to STS users.

Louisiana Relay complies with the 15-minute requirement prior to changing STS CAs. A Supervisor must approve and facilitate a STS CA change. Louisiana Relay exceeds the FCC standard for substitution of STS CAs.

If a change in STS CA is necessary, another CA will replace the CA relaying the call at the same workstation so that the relay user's call is not interrupted except to identify the new CA to both parties. The replacement STS CA will announce, "This is CA# \_\_\_\_\_ continuing your call." A supervisor monitors the change and must approve the change based on the caller's request or emergency circumstances.

All STS CAs have the authority, at the request of the STS user, to retain information beyond the duration of a call in order to facilitate the completion of consecutive calls. This information is retained only for the duration of the inbound call. STS CAs retain any important information given by the STS user which might be difficult for the STS relay user to repeat (i.e. credit card numbers, telephone numbers, account numbers, etc.) for use in a subsequent outbound call. Louisiana Relay places a great emphasis on maintaining the confidentiality of relay users. As a result, all information is destroyed immediately upon termination of the inbound call. The above meets all FCC requirements for Speech to Speech call processing.



**§ 64.604 Mandatory minimum standards.**

*(b) Technical standards –*

*(1) ASCII and Baudot. TRS shall be capable of communicating with ASCII and Baudot format, at any speed generally in use.*

Louisiana Relay is capable of receiving and transmitting using Voice, Turbo Code, ASCII or Baudot formats, at any speed generally in use. All equipment is compatible with industry-wide standards. The modems used by Louisiana Relay can auto-detect the difference between ASCII and Baudot signals within the same modem so that each call is connected correctly.

*(2) Speed of answer.*

*(i) TRS providers shall ensure adequate TRS facility staffing to provide callers with efficient access under projected calling volumes, so that the probability of a busy response due to CA unavailability shall be functionally equivalent to what a voice caller would experience in attempting to reach a party through the voice telephone network.*

*(ii) TRS facilities shall, except during network failure, answer 85% of all calls within 10 seconds by any method which results in the caller's call immediately being placed, not put in a queue or on hold. The ten seconds begins at the time the call is delivered to the TRS facility's network. A TRS facility shall ensure that adequate network facilities shall be used in conjunction with TRS so that under projected calling volume the probability of a busy response due to loop trunk congestion shall be functionally equivalent to what a voice caller would experience in attempting to reach a party through the voice telephone network.*

*(A) The call is considered delivered when the TRS facility's equipment accepts the call from the local exchange carrier (LEC) and the public switched network actually delivers the call to the TRS facility.*

*(B) Abandoned calls shall be included in the speed-of-answer calculation.*

*(C) A TRS provider's compliance with this rule shall be measured on a daily basis.*

*(D) The system shall be designed to a P.01 standard.*

*(E) A LEC shall provide the call attempt rates and the rates of calls blocked between the LEC and the TRS facility to relay administrators and TRS providers upon request.*

Louisiana Relay is committed to complying with the speed of answer requirements applicable to relay. Louisiana Relay answers ninety percent (90%) of calls within ten (10) seconds from the time the call enters the TRS system during all times of the day by any method which results in the caller's call immediately placed, not put in a queue or on hold.

Louisiana's Relay provider begins measuring Average Answer time from the moment a Relay call arrives at its relay switch (i.e. in the TRS center's network). As soon as the equipment used by Louisiana's Relay provider accepts the call, call detail records start to capture answer time data. Louisiana Relay's timing is very accurate as no rounding takes place since this time is measured in seconds. The information reported is taken from Call Detail Records ensuring the accuracy of the data. Each call detail record tracks the amount of time a call waits to be answered. Louisiana Relay's CAs do not answer a call until they are ready to engage the call. Calls in queue or calls receiving the intercept message are not counted as answered. This "queue time" field will be analyzed and reported, but not billed. Abandoned calls are included in the speed of answer calculation.

Louisiana Relay has the ability to monitor speed of answer on a real-time basis via a monitoring system that is accessible to management and supervisors. This information is utilized to make CA staffing changes throughout the day. Average Answer time is displayed on the supervisor console. The Supervisor workstation and reader boards in the center indicate if calls are in queue waiting to be answered. The Supervisors are responsible for making sure that when that alert comes up that all available CA resources are logged in to the system and answering calls. Each of these tracking mechanisms allows Louisiana Relay to respond quickly by adding more CAs immediately.

Daily activity reports used for internal management purposes also track answer performance information for future scheduling. In addition, Louisiana Relay uses a variety of other scheduling techniques to ensure that staffing meets traffic demands. Louisiana's Relay provider makes use of historical data, trending, call patterns and combines that with the knowledge of current events (e.g. football games, weather, Mother's Day, etc.) to anticipate staffing needs.

Louisiana Relay has outstanding answer performance. Average answer seconds for the past year were 1.1 with 95% of calls answered in ten seconds or less.

Louisiana Relay also meets all FCC call blockage standards. Louisiana Relay's relay service is designed to a P.01 standard. No more than one call in 100 will receive a busy signal when calling the relay center at the busiest hour. Louisiana Relay defines "blockage" as any call that arrives at the relay switch but is not answered due to the customer receiving a busy signal. Currently, Louisiana Relay has never come close to blocking 1 call in 100.

The systems used by Louisiana Relay's are designed to prevent blockage. The switches used are high-speed, stand-alone, non-blocking digital switching matrixes. The system is fully redundant to ensure quality and reliable performance, making blockage or any downtime nearly impossible. The system auto-detects any problems and moves to the secondary system immediately if necessary.

Another measure Louisiana Relay has taken to prevent blocking is to use networks that make use of SONET survivability technology. All of the networks controlled by Louisiana Relay - from the point a relay user picks up the phone in their home or business, through the relay and then

back to the other phone being called - are redundant and can survive fiber cuts and other such outages.

Louisiana Relay measures, records and reports its answer performance and blockage rate information to the Relay Administration Board (RAB) and abides by the FCC rules (i.e. a LEC shall provide the call attempt and the rates of calls blocked between the LEC and the relay center upon request).

The transmission circuits used by Louisiana's provider meet or exceed industry interexchange performance standards for circuit loss and noise.

*(3) Equal access to interexchange carriers. TRS users shall have access to their chosen interexchange carrier through the TRS, and to all other operator services, to the same extent that such access is provided to voice users.*

### **Equal Access (Carrier of Choice)**

Louisiana Relay provides relay users with access to the interexchange carrier of their choice through TRS, and to all other operator services, to the same extent that such access is provided to voice users. Interlata and intralata long distance toll charges are recorded and billed by the relay user's carrier of choice in the same manner as the carrier bills that customer for long distance calls made without the relay. On each interlata and intralata call, Louisiana Relay forwards the appropriate information digits (identifying the call as a relay call), calling number and called number as part of the call information so that the long distance company can bill the customer at correct functionally equivalent rate through their normal billing mechanisms. Calling card or credit card billing is handled in the same manner. Louisiana Relay's provider has provisioned the necessary trunks at each of its relay switching tandems for all long distance companies participating in equal access so that they can receive Louisiana Relay traffic. Louisiana Relay offers equal access to all carriers who choose to participate.

Louisiana Relay provides relay users with access to all other Operator Services to the same extent as that provided to voice users. Operator services are handled in the same manner as explained above. All operator assisted calls are sent to the customers' carrier of choice for processing and billing.

The type of arrangement explained above gives the control to the relay user. The relay user can pick their carrier of choice, receive one bill for all of their calls, and the relay user can shop for the best rates, just like they do today for calls not made through the relay. The relay user can continue to work with one carrier and the relay remains invisible.

The customer profile program used by Louisiana Relay is based on the relay users' ANI that provides automatic connection to the carrier of choice for both interlata and intralata calls made by the relay user. Relay users complete a customer profile with their carrier information and Louisiana Relay adds this information to its database. On each subsequent relay call relay users are automatically connected to their carrier of choice. Relay users can also notify the CA of their carrier of choice when making a long distance relay call. In the event a relay user elects to change his/her carrier of choice, the CA is able to do so.

Louisiana Relay offers 1010 dialing through the relay. This service is functionally equivalent to using 1010 services when not placing calls through the relay.

In order to obtain new carriers on its platform, Louisiana Relay contacts all carriers that are requested by Louisiana relay users to see if they will participate in relay equal access. Louisiana's Relay provider then works through ordering and testing phases with that carrier to ensure that the carrier becomes available to Louisiana relay users. Louisiana's Relay provider maintains a list of participating long distance carriers and makes this information available to relay users.

*(4) TRS facilities.*

*(i) TRS shall operate every day, 24 hours a day. Relay services that are not mandated by this Commission need not be provided every day, 24 hours a day, except VRS.*

Louisiana Relay provides telecommunications relay service 24 hours a day, 7 days a week. .

*(ii) TRS shall have redundancy features functionally equivalent to the equipment in normal central offices, including uninterruptible power for emergency use.*

The facility used by Louisiana Relay has the needed redundancy in switching mechanisms and telecommunication facilities to ensure operation 24 hours a day. Louisiana Relay is operated from an in-state center located in Baton Rouge, Louisiana. Louisiana Relay calls automatically overflow during peak volume times and during any failure of switching or telecommunications facilities to other centers operated by the Louisiana relay provider. This ensures continuous operation of the Louisiana Relay.

The switches and relay platforms used by Louisiana Relay's provider's are located in the Louisiana and the Nebraska relay centers. Workstation equipment, database information, and CA are located in all relay centers. Workstations in the Maryland and Massachusetts centers are controlled by the main processing and switch unit located in Nebraska via digital telecommunications facilities which are redundant T -1 circuits. Workstations in the Louisiana Center are controlled by the main processing and switch unit located in Louisiana via digital telecommunications facilities which are redundant T -1 circuits. All incoming relay calls enter the relay provider's network. Calls can then be connected to workstations in any of the Relay provider's facilities. This all happens instantaneously with no call delays. Calls made to the terminating party exit through the call network as well. Louisiana Relay users receive outstanding call processing and superior answer performance as a result of this network configuration.

**Uninterruptible Power**

All relay centers operated by Louisiana's Relay provider make use of an uninterruptible power source with full battery backup to operate each center at full capacity for extended periods of time. In addition, battery back-up systems have the capability to automatically connect to a generator at each of its existing relay centers. The combination of battery and generator back-up

allows Louisiana Relay's provider to provide relay service for days and weeks at a time during power outages.

The power system supports the switch system and its peripherals, switch room environmental (air conditioning/heating, fire suppression system, emergency lights & system alarms), CA consoles/terminals, CA work-site and lighting and Call Detail Record recording at each center. Employees are given procedures to follow in the event of emergency.

Louisiana's Relay provider provides auxiliary power sources for nine central offices in addition to all its relay centers and has significant experience at purchasing, installing, testing and insuring that such back-up equipment is in place. All of Hamilton's back-up power systems have redundancy features functionally equivalent to the equipment in normal central offices including uninterruptible power for emergency use.

### **Switching System**

Louisiana Relay provider's second generation relay platform makes use of an Excel telecommunications switch. Its switch is a programmable, non-blocking switching system that supports a wide range of digital telephony services. Its open, modular architecture and programmable interfaces allow for simplified and cost-effective application development. The switch supports up to 2,048 ports in a single high-density system. Its components include a matrix CPU, network interface cards, Digital Signal Processing service cards and SS7 packet engine cards. The switch adapts to all standard network and line interfaces, including T1, E1, 11, and ISDN PRI.

The InterCall Switch Operating System (ISOS) was developed in response to the need to quickly develop applications on the Excel Inc. programmable switching platforms. The ISOS can simply be loaded on a UNIX host, and plugged into the switch to offer basic tandem type switching capabilities including routing and call detail records.

The ISOS is a fully operational basic switch and has great flexibility. Louisiana's Relay provider took advantage of this flexibility and has customized many relay functions in the ISOS operating system.

The relay workstation application takes advantage of the power and flexibility of the ISOS operating system. It provides a high level of Communication Assistant control processing with complete flexibility to connect any type of call protocol to any other type of call protocol. A database was developed to maintain a profile of each caller to speed up call connections and to provide information for tailored call processing. The switching systems contain a fully redundant central processing unit on hot standby with automatic failover. This is to ensure that no calls are dropped due to technical failure. It also has a redundant power supply on hot standby. Backup control and database servers are also on hot standby with automatic failover. Louisiana's Relay provider maintains an inventory of spare critical components for the switching system onsite to ensure that the required levels of service are met (listed below).

The on-sight switching system spare equipment includes:

- D4 channel bank
- All required channel bank cards
- T1 CSU packs
- Switch T -1 card
- Switch conference card

If one of the switching systems cannot be returned to service by transferring control to redundant equipment, the calls automatically will overflow to another switching system. The switching systems are designed to provide a very high level of operational security with two fully redundant processors and power supplies in each switch. Each fully redundant control system, which includes keyboard, monitor and printer capabilities, is used to control and monitor each of the switching systems. The control systems provide online system monitoring and real-time programming capabilities that will not take the system off-line and the ability to perform preventative maintenance or repair while the system is online. Remote capabilities are also provided so the system can be remotely monitored, reconfigured or controlled as necessary. All of this is provided to ensure the required levels of service are always met.

Louisiana's Relay provider has made changes to its relay platform in recent years, making use of leading edge technology. It has upgraded its switching servers to new hardware that evolved its switching operating system from 32 bit UNIX to 64 bit Linux for more robust hardware support; and tested and deployed new switching control code which allows additional ad hoc reporting capabilities for comprehensive traffic analysis and enhanced failover and recovery. Louisiana's Relay provider has also replaced database servers with new hardware and replaced legacy profile database servers with SQL servers for improved redundancy and database management. Finally Louisiana's Relay provider has completed a multi-year upgrade of all production workstations to newer, standardized hardware; upgraded workstation operating systems from 16 bit to 32 bit which provides a higher level of stability; and rolled out several new workstation versions to support a variety of new features.

*(5) Technology. No regulation set forth in this subpart is intended to discourage or impair the development of improved technology that fosters the availability of telecommunications to person with disabilities. TRS facilities are permitted to use SS7 technology or any other type of similar technology to enhance the functional equivalency and quality of TRS. TRS facilities that utilize SS7 technology shall be subject to the Calling Party Telephone Number rules set forth at 47 CFR 64.1600 et seq.*

#### **Upgrades in Technology/Process in Determining of Technology is Reliable**

Using flexible software and hardware (i.e. standard carrier switch, common equipment frames, standard T1 interfaces, windows servers, UNIX operating System, etc.) where components can easily be modified in order to accommodate new technology, the platform used by Louisiana Relay is ideal for today's rapidly changing technologically advanced environment. Louisiana Relay's provider takes advantage of innovations and technological improvements to enhance the state of Louisiana's relay service.

**Signaling System Seven (SS7)**

The relay platform used by Louisiana Relay has made use of SS7 signaling since February 2002. The Relay platforms have been retrofitted to deliver Caller ID in the same manner that these services are delivered today in the public switched network (i.e. Louisiana Relay provides true Caller ID service where the actual information of the calling party (not the relay center number) appears on the called party's Caller ID box).

*(6) Caller ID. When a TRS facility is able to transmit any calling party identifying information to the public network, the TRS facility must pass through, to the called party, at least one of the following: the number of the TRS facility, 711, or the 10-digit number of the calling party.*

**True Caller ID**

Through the use of SS7 signaling Louisiana Relay provides true Caller ID service where the actual information of the calling party (not the relay center number) appears on the called party's Caller ID box. Louisiana Relay provides this information on all call types and on all carriers. Louisiana Relay brings true functional equivalence to Caller ID relay users.

Louisiana Relay receives and passes calling line identification information, including blocking information from all users calling through the relay service.